Relay wiring: flip flop toggle

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Category: Electronics
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Materials:

Kit 74
2 Lamp Sockets with leads
2 bulbs
1 lamp cord
screw driver
wire nuts

Toggle a pair of bulbs on and off using a Kit74

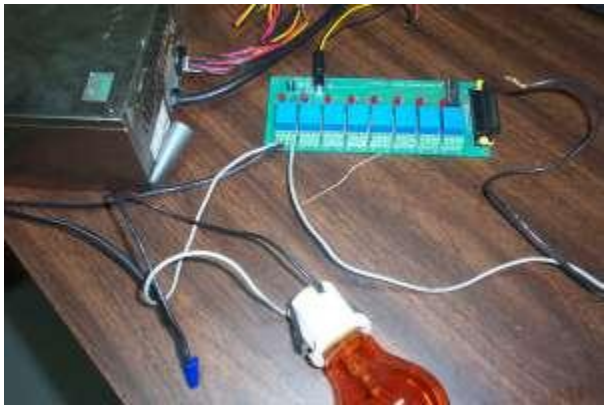
Wiring a Relay: Flip Flop (Toggle) Switch

This is a simple wiring guide. It will show you, with photos, how to wire up a pair of light bulbs to a single relay on the kit74. This will allow you to use the Haunt Controller software to toggle the state of the lamps. When one bulb is on, the other will be off.

This article assumes that you have read, completed, and are starting from where the Wiring a Relay: Simple Switch left off.

You will need a Kit74, assembled, a lamp cord with plug, 2 lamp sockets with leads, 2 light bulbs, and a couple of wire nuts.

WARNING: This how-to uses 110VAC household current! Attempting this project is at your own risk. Household current can kill, so be sure to unplug things you are working on BEFORE you touch any wire, and follow standard electrical guidelines. If you feel that you cannot handle this project, do not attempt it!



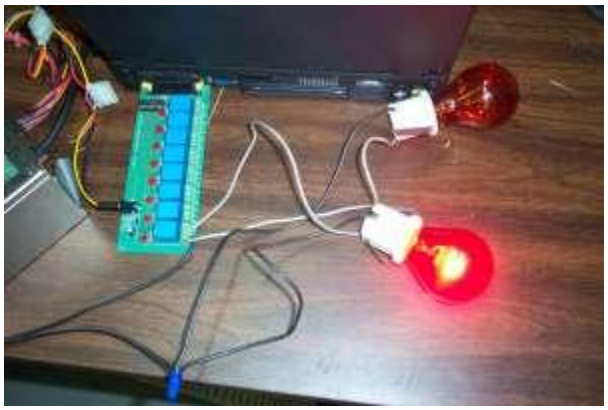
MAKE SURE EVERYTHING IS UNPLUGGED!

First, start off with the wiring configuration that was taught to you in the Wiring a Relay: Simple Switch project. Take your second fixture, and strip 1/8" of the insulation off one

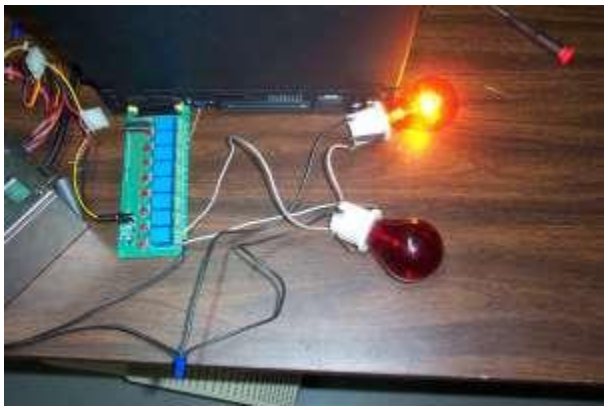
lead, and 1/4" off the other lead. Twist the strands on each lead so they stay in place. Take the 1/8" of bare wire, and insert it into the terminal marked "NC" (Normally Closed) on the same relay as the original set of wires. (See photo for details).

This photo shows the complete connection.

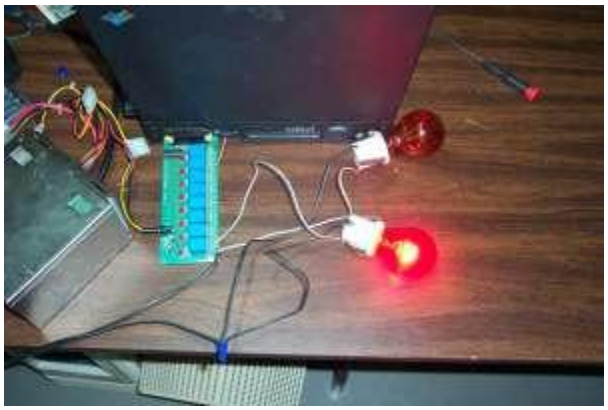
Now, undo the existing wire nut, take the free lead (it should have the 1/4" of bare copper wire), and twist all three wires together. Use the wire nut to hold it all together. The above photo shows the wiring. (Click on the picture for a larger view!).



Plug everything in, and fire up the Haunt Controller software. Immediately after plugging in your lamp cord, you should have noticed that the lamp attached to the "NC" terminal is already lit.



Now, turn on the relay. The lights will flip, turning on the lamp that is connected to "NO" and turning off the lamp that is connected to "NC". Note that the LED is on in the above photo.



Turn off the relay, and the lamps will return to their original state.

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